

State of the Hanford Site
Portland, Oregon
March 31, 2011
Meeting Notes

Agencies Overviews

U.S. Department of Energy-Richland Operations Office (DOE-RL): Meetings like this one and public involvement make a difference. We need you and your input to sustain support for Hanford cleanup. The message from the DOE Office of Environmental Management is that cleanup is a responsibility, an obligation; it is not discretionary. The strategy for the cleanup of Hanford is captured in the 2015 Vision: cleaning up along the (Columbia) River is our focus; removing contamination adjacent to the river and moving it to the Central Plateau to protect the Columbia River. K-area cleanup (namely the sludge remaining from the spent fuel stored in the K-West basin) is the long pole in cleaning up the River Corridor.

Cleaning up along the River was a top public priority. Another public priority was groundwater. Because of your input/comments, DOE increased its focus and resources to clean up groundwater. We plan to complete construction of one of the largest groundwater pump-and-treat facilities located on the Central Plateau (200-West Area) by September 2011 and expect it to be operational by December 2011.

U. S. Department of Energy-Office of River Protection (DOE-ORP): 177 (149 single-shell tanks) underground storage tanks reside in 18 tank farms located in the Inner Area of the Central Plateau. The tank farms are spread over seven miles requiring an extensive infrastructure to be able to move waste to the Waste Treatment Plant – WTP (currently under construction) for treatment. By 2016, construction of all of the WTP facilities will be complete and 16 of the 18 facilities will have gone through commissioning. WTP will become operational in 2019 with 70% throughput expected in 2022. Our goal is to begin making glass in the low-activity waste (LAW) facility by 2016. We believe we can do some in-tank pretreatment that would enable us to feed waste to the LAW facility. DOE-ORP and its contractor have made great strides in addressing one of its hardest challenges –getting greater retrieval access to the wastes in the tanks (12” access ports were expanded to 55”). We plan to use (this summer) a very promising technology – the mobile arm retrieval system (MARS) to get the waste out of the tanks.

Hanford is the largest Environmental Management liability in the DOE (cleanup) complex. Our remaining challenges include:

- Removing spent fuel sludge from the Columbia River
- Removing 20 metric tons of plutonium
- Removing and treating tank waste.

We cannot do this alone. We need your continued support and involvement.

(The DOE-RL and DOE-ORP presentation is available at www.hanford.gov/files.cfm/DOE_SOS_Vision_FINAL.pdf)

Washington State Department of Ecology (Ecology): A tremendous amount of cleanup has been achieved at Hanford. The large amount of stimulus funds was used effectively. The State’s role is as a co-signer to the Tri-Party Agreement (TPA). Ecology and EPA work together to implement and ensure high-quality cleanup is done; cleanup that meets requirements and is sustainable for the future. The

State of Washington has a Memorandum of Understanding (MOU) with the State of Oregon to comment on issues of mutual concern and provide feedback on the concerns of Oregon residents.

The agencies have not held State of the Hanford Site meetings the past couple of years. Instead we held meetings on a few really critical issues (e.g., solid waste burial grounds, Draft Tank Closure & Waste Management Environmental Impact Statement – TC&WM EIS) on which we wanted input from you. Ecology heard about not wanting the importation of offsite waste before Hanford was cleaned up. There is a moratorium in place preventing waste from coming to Hanford before the final TC&WM EIS is issued. That document states no offsite waste will come to Hanford before the WTP is (fully) operational in 2022, at which time we will relook at the issue before any decision is made.

Hanford cleanup is all about protecting the Columbia River. We have goals and TPA milestones to keep contamination from entering the River. The recently signed Consent Decree looks for ways to optimize and speed up tank waste cleanup and construction and operation of the WTP. I want to recognize Earl Fordham with the Washington State Department of Health, Office of Radiation Protection. This is the lead organization for monitoring/overseeing/evaluating effects from the Japanese nuclear incident. He is here this evening as a resource to answer questions related to that incident.

Comment: You say there is no waste coming into Hanford; what about the atomic submarine reactor cores?

Answer: Ecology: In the Settlement Agreement, six items are exempt from the moratorium. The submarine reactor cores are one exemption; another is demolition waste from a local decontaminated hospital room.

U.S. Environmental Protection Agency (EPA): The video asked for one word to describe Hanford. My word is “marathon.” What would be your word? Twenty-one years into cleanup we’ve made tremendous progress. Depending on how you view it, we are one-half to one-third done. I want to thank all of you who have stayed with us during the years. The agencies could not have gotten this done without the involvement of Pacific Northwest citizens.

We’ve made tremendous strides in cleaning up the groundwater. The additional \$2B in stimulus money put a lot of people to work and got a lot of cleanup done. I believe we can stop contamination from entering the Columbia River. Ten million tons of waste were removed from areas along the River. Given the current climate, Hanford did well in terms of the 2013 budget.

DOE has a new message – a very powerful new message. The message is that cleanup is not discretionary but an obligation to the people of the U.S. and cleanup is the largest environmental liability.

We are here to night to hear from you – your issues, comments, and concerns. We will get back to you if we do not have the answers to your questions.

Local Perspective

Oregon Hanford Cleanup Board: Welcome on behalf of the State of Oregon and thanks to those of you who have followed Hanford issues for years. You have, you do make a difference. The involvement of Oregon has made a difference in Hanford cleanup – two areas are groundwater and public involvement.

Oregon continues to be involved. The Oregon Hanford Cleanup Board was established in 2003. It is comprised of eighteen members; nine of them are citizen representatives. The Oregon Department of Energy, Nuclear Safety Division is actively and consistently involved in various forums. These employees are dedicated, knowledgeable, and tireless.

Tough cleanup challenges remain:

- Containment and treatment of deep vadose zone contamination (the real threat to the Columbia River);
- Retrieving and treating tank waste.

Hanford Advisory Board Chairperson

The Hanford Advisory board is a 31-member board that contains over 1000 years of direct Hanford involvement. I encourage you to visit our website found at www.hanford.gov/

Public Issues/Dialogue

Comment: Where are you spending the money? Sounds like you're doing a great job. What is happening with the vit plant? Why are you not moving faster? About 20 years ago I saw vitrification being demonstrated in the soils? Why is that not being used now? What happened to the Fast Flux Test Facility (FFTF)?

Answer: DOE-RL: FFTF is shut down. The final decision on its disposition will be made in the TC&WM EIS. Yes, we did experiment with/test in situ-vitrification on contaminated soils. Because of safety issues (needing to contain volatile gases) and difficulty applying it to large scale areas, this technology was not pursued.

Comment: I understand the 2015 goals you set are being pushed back because of K-area and chromium.

Answer: DOE-RL: Regarding the K-area, our challenge is dealing with the sludge in the 100 K-West basin. Once the sludge is removed, the basin can be removed and the soils under the basin cleaned up. Right now those soils would not be cleaned up until after 2020. We are aggressively looking for ways to accelerate that schedule. Today, we are cleaning up the surrounding waste sites. Our other technical challenges is remediating the uranium groundwater contamination in the 300 Area to restore drinking water standards.

Answer: EPA: We still need to deal with the reactors that are in interim safe storage (ISS). The long-term goal is to move them off of the River. How the reactors will be disposed of is a future decision.

Comment: I would like to thank everyone for not using bottled water. The video was very sad. It shows our love of war. I want no new waste brought in, no new waste brought in, no new waste brought in! You say you are getting work done. If you plan on bringing in more waste, how will you ever get done?

Comment: It would be very disturbing if significant amounts of hexavalent chromium are getting into the river. What would be the impacts? How do pump-and-treat systems and apatite barrier stop this contamination? Are you looking to see if other contaminants are present in the Columbia River? What about contaminated soils that could affect the groundwater?

Answer: DOE-RL: A small amount of chromium is entering the river; by the time it hits the water column it is undetectable. The goal by 2012 is to stop contaminated groundwater from entering the river. By 2020 our goal is to clean up all contamination.

There are four pump-and-treat systems in place and a fifth system will be added this summer. The pump-and-treat system extracts the contaminated groundwater and uses an ion exchange system to remove the chromium. Clean groundwater is then injected back into the ground. An apatite barrier is used for strontium-90, not chromium. We can clean up all the hexavalent chromium with pump-and-treat systems. We do need to remove (dig up) source terms (contaminated soils) that could in the future contaminate the groundwater.

Comment: You talk about cutting costs, limited budgets and cleanup work you would stop. Who needs a national park when Hanford is still glowing?

Comment: We're getting mixed information about Japan. What the plant was used for and what was used in the reactor. There is all this information talking about exposures. Now we're hearing that our reactors could be used for this. We got rid of Hanford plutonium by sending it to Savannah River. We just found out there are plans to bring it back (to the Northwest) and feed it into a reactor (Columbia Generating Station). If you have any plans to experiment with Hanford reactors, do not do that.

Answer: DOE-RL: Hanford has no operating reactors. The reactor you are referring to (Columbia Generating Station) is a commercial reactor.

Comment: In reference to the current conditions in Japan, what are the most catastrophic points at Hanford? As a community, we need to know this information so we can become more educated. What are those low risk events with high consequences? What are the top three?

Answer: DOE-RL: We have done these analyses as part of our nuclear safety requirements. They are:

- Tank waste: Earthquake or fire (need to mitigate the spread of contamination)
- Plutonium Finishing Plant (PFP): residual plutonium in the gloveboxes and piping
- Radioactive sludge (30 cubic meters) in the K-West Basin near the river.

Comment: I grew up in Richland; went fishing and swimming in the river. It seems like vitrification work has been going on for decades at a snail's pace. Hanford is a black hole where money goes in without anything coming out. My father worked at Hanford and died at the age of 39. I'm concerned about contamination migrating to the aquifer and then to the River. The 2012 date seems unreal to stop the chromium. How are you going to do this using just pump-and-treat systems? Are you testing invertebrates and resident fish? There seems to be little concern about the slowness in building the vit plant.

I understand Yucca Mountain has new waste (acceptance) specifications and that the material the WTP produces will not meet those criteria and be accepted.

Move groundwater up the priority list.

Answer: EPA: We do not want to give the impression that we've just started work to address chromium contamination. The work to clean up chromium began almost 20 years ago. We've removed a tremendous amount from the groundwater and have removed, treated and sent to the Environmental Restoration Disposal Facility (ERDF) a lot of the source term (soils). The groundwater pump-and-treat systems have been operating for the past 10-15 years and we are looking to expand them. I believe 2012 is a doable goal.

There are still tremendous problems. There are serious issues with uranium in the 300 Area and a lot of challenges with the Central Plateau groundwater, but we are making progress.

Answer: DOE-ORP: Work at Yucca Mountain was suspended. The President established a Blue Ribbon Commission on how to best meet those needs. Their report is due July 2011. DOE-ORP has not changed its waste acceptance criteria.

Answer: Ecology: The State filed a lawsuit on DOE for pulling the Yucca Mountain license. High-level waste needs to go to a deep geologic repository (somewhere). The decision should be based on science, not politics. DOE needs to go through the licensing process to determine if it is safe.

Comment: You are stewards of the Columbia River system. My concern is that the Columbia River flows into the Willamette River and our fish are mingling with the fish spawned on the Hanford Reach. Currently radiation and heavy metals are found in the Hanford Reach area spawning grounds. Fish are genetically affected by radiation. EPA has long talked about dilution; but little fish are eaten by bigger fish. This affects the salmon runs. The McKenzie River fish bring back Hanford radiation. DOE needs to be held responsible. Focus on energy, not war. I fear radioactive waste is being spread around by the fish. How are you going to control this? Are you planning to kill off all the fish with the dams? How do I find out if radioactive fish are coming back into the Willamette River System and the McKenzie River?

We are downwind, down river of the nuclear power plant (that DOE does not run). Turn off the nuclear power plant. 7% of the people in Eugene do not want to buy power from Bonneville Power Authority. Eugene wants the Columbia Generating Station turned off.

Answer: DOE-RL: Contamination is entering the Columbia River. Chromium affects juvenile salmon. We have tested the fish for decades and have found no evidence of radiation. There are some heavy metals, like mercury, out at sea where the salmon feed. We've done a lot of extensive environmental tests and have more information that we can provide you.

Answer: EPA: If you provide your contact information, I will provide you with information on the Columbia River Toxics Program Report. This report is based on a large study EPA is doing.

Comment: The agencies need (are required) to do regular/annual meetings and these meetings need to be better publicized. I appreciated the ad in the *Willamette Weekly*. Do we really need nuclear power? There are many alternative energy sources. Do not put money into building more nuclear

plants; put more money into other safer alternatives. What were you thinking to build a nuclear plant with the Columbia River below?

Answer: EPA: Reactors were located near large bodies of water like rivers for a reason. Cold, fresh water is needed to cool the reactors that generate a lot of heat. It was a very logical decision at the time.

Comment: You said chromium is not harmful. You are wrong. By EPA rules, Hanford exceeds the safe level by 10 times. By definition, you are not safe. When you say things like that you are less credible. You need to slightly change your message. The message should not be “we need more money, because we are doing a good job.” If you are doing a good job, then you do not need more money. You should be saying, “We have a problem. We need to clean up the chromium and we need money to do that.”

The TC&WM EIS acknowledges new waste may be brought to Hanford. Given the limited budget, how can you even consider this? Commit to finishing cleanup first.

Answer: DOE-RL: Chromium can affect juvenile salmon. By the time it hits the water column it is undetectable. We find no amounts that could impact the salmon. DOE has committed to not import waste until 2022 when the WTP is operating. At that time that decision will be re-visited. Public involvement will have an impact on that decision.

Comment: DOE was formally told by a number of environmental organizations to withdraw their 2004 decision to make Hanford a national waste dump. And you refused. It is ingenious to say that you are not considering importing new waste as long as the 2004 decision exists. There are plans to bring in three million cubic meters of radioactive waste plus highly radioactive waste known as Greater Than Class C (GTCC) waste. There is a public meeting in Portland May 19 on this decision. You need to come out to this meeting.

You plan to use Hanford as a national waste dump based on the 2004 decision. What if the plant never operates, will you start importing more waste? No more waste until Hanford cleanup is done! Why will DOE not withdraw its decision designating Hanford as a radioactive waste dump? You plan to come out in 2022 and show you are adding more waste. No new waste!

Answer: DOE-RL: No decision has been made to bring GTCC waste to Hanford. The draft GTCC Environmental Impact Statement has no preferred alternative. It looks at five or six alternatives. The Hanford alternative is not discussed as a favorable one.

The Waste Management Programmatic Environmental Impact Statement (WM PEIS) is the 2004 decision document referenced. The WM PEIS will be superseded by the Tank Closure and Waste Management EIS – the decision document for Hanford site waste management activities. DOE will not consider offsite waste until after the WTP operates.

Comment: When is the TC&WMEIS coming out?

Answer: DOE-ORP: The draft came out last year. DOE received over 5000 comments plus new information. We are currently considering all input. A final EIS is planned for the end of this year.

Answer: Ecology: No offsite waste will come to Hanford until the WTP is up and completely operating. If the WTP does not start, offsite waste will never come to Hanford.

Comment: DOE legal counsel disagrees with the State's position.

Answer: Ecology: A substantial environmental analysis would be needed. The State and the Governor's commitment is no waste.

Comment: DOE does not want to withdraw the 2004 decision. DOE refused in the pending EIS to reconsider adding more waste to Hanford. The TC&WM EIS discusses where to put waste not if it should come. This document does not supersede the former decision. If it does, then withdraw the decision from the TC&WM EIS and inform DOE-HQ. The TC&WMEIS risk projections show extreme future impacts (100 years, 2000 years from today). If you withdrew the decision, you would earn some trust.

Comment: I support 100% what was just said. I oppose any more waste coming to Hanford. Thank you for the progress that's been made – in groundwater, in moving contaminated soils to the Central Plateau. Your priorities need to address those catastrophic risks identified earlier. The elephant in the room is the Columbia Generating Station. I know DOE does not have responsibility for it. That is an older reactor. It has produced waste for a long time. The plant is coming up for relicensing to extend the current license from 2023 to 2043. What happens to Hanford cleanup if something happens at the Columbia Generating Station? There would be an impact to cleanup. DOE, you should be part of the relicensing process. What could be the cleanup impacts? Are you, DOE, looking at this; at the plant operating near you? Are you going to be involved in the relicensing?

Answer: DOE-RL: DOE is involved with the Columbia Generating Station in terms of cleanup. There is one Hanford burial ground close to the station that we are looking to remove. It is a good idea (for DOE) to get involved in extending the license.

Comment: What would be the impact if there was an accident?

Answer: DOE-RL: It would only impact the surrounding waste sites.

Comment: But it could go beyond those sites.

Answer: DOE-RL: Yes.

Comment: This is a seismic area. There is a nuclear holocaust in Japan. We've been told we are still safe here. What is the plan for evacuation, relocation? New people moving to Portland do not know about Hanford. What are we going to do if there is a major earthquake?

Answer: DOE-RL: We do have emergency preparedness plans. All of the facilities are analyzed for hazards. We have plans in place to mitigate those hazards that include specific evacuation, sheltering plans. We work with the counties and cities in case a release went offsite. DOE conducts an annual exercise and quarterly drills. The State of Oregon participates in these drills.

Answer: State of Oregon: The State of Oregon is an active participant in the Emergency Preparedness Programs at Hanford and the Columbia Generating Station. We practice with them regularly and with

the local counties, including what to do should an evacuation be needed. There is a coordinated, concerted effort between the two States and the counties. Our role would be to 1) inform the public and 2) take steps to control potential contamination of food stuff. FEMA's rating of Oregon is excellent.

Based on what happened in Japan, President Obama promised a thorough analysis of what went wrong. We could see results here from that analysis in terms of spent fuel storage pool configuration. I expect to see in the next 1-2 years some changes in all nuclear plants and the surrounding communities.

Comment: I think it would be most effective for DOE to participate in the relicensing of that commercial generator. Is Oregon involved in this process?

Answer: State of Oregon: Yes. Oregon has been in initial discussions with the Columbia Generating Station. I believe because of recent events in Japan this will result in greater Oregon involvement.

Comment: What are the seismic ratings for some of the Hanford facilities, like WTP, ERDF, and Central Plateau Complex?

Answer: DOE-ORP: WTP rates 6.0 on the seismic scale. There are major differences between WTP and an operating nuclear reactor. A nuclear reactor operates at high temperatures and under high pressure. The WTP does not. WTP does not require water for cooling. WTP radioactive levels are lower than those of a nuclear reactor.

Comment: Where is Columbia Generating Station located?

Answer: DOE-RL: About 1 or 2 miles from the River.

Comment: The use of mixed oxide (MOX) fuel in the Japanese reactor heightened the accident. Do not use it. Importing waste raises a lot of safety transportation issues. Hanford's priority should be to clean up the groundwater and contaminated soil; to keep the plumes from moving toward the River. The longer you wait to clean up Hanford, the more expensive and difficult it will be.

I think the public involvement process should be improved. Have these types of meetings more often.

Comment: The image of Hanford you are presenting is: Hanford is getting cleaned up and you are decontaminating and demolishing a lot of buildings, except for Greater Than Class C waste. Are there other facilities that are operational? What is the production status at Hanford?

Answer: DOE-RL: There are no operational production reactors at Hanford.

There are two commercial low-level burial grounds operated by U.S. Ecology that are permitted by the Washington Department of Health. They take hospital waste, decontaminated Trojan waste. They take no Hanford waste. There is LIGO (Laser Interferometer Gravitational Wave Observatory). It measures gravity waves. Pacific Northwest National Laboratory operates research and technology development laboratories in the southern part of the 300 Area

Comment: They have a large hot cell and fabricate tritium triggers/targets.

Answer: DOE-RL: They have a few small hot cells. I do not know what is fabricated.

Comment: I would like to return the discussion back to cleanup. I've been working on Hanford issues for almost 19 years and I've seen a lot of cleanup work, especially in the last 1½ years with stimulus funding. I want to applaud the agencies for having work (shovel) ready; they have great people doing the work; the money is being used well. Getting this work done will save us money in the future.

I do have concerns about some of the Hanford cleanup. I am concerned about WTP. Some of the work appears to be piecemeal. Ecology, what do you see as the 2 or 3 showstoppers to this facility working well?

Answer: Ecology: Ecology's primary regulatory oversight is WTP and the tanks. The State has responsibility to permit the WTP, a large chemical treatment facility. Our issues of concern are:

- Waste mixing
- Waste feed: How do you get the waste feed from the tanks in the right amount and constituency. Ecology is pleased at the potential to start up the LAW facility so it could begin processing waste early. It is a lengthy process for a facility to become operational. There are cold start ups followed by hot start ups.
- Complexity of the pretreatment facility.

The State is actively overseeing this process and bringing in technical consultants to work with us.

Comment: Is mixing a criticality issue with regard to hydrogen build up?

Answer: DOE-ORP: Yes. It is a criticality issue for the Defense Nuclear Facility Safety Board (DNFSB). The issue is can we do adequate mixing of the waste to keep solids suspended so as not to form a heel. We are working this issue. For example, we will install cameras into the vessels to see if heels are forming; we are developing a heel purge system; we are building a facility to perform some integrated testing.

Comment: I am trained by FEMA to deal with a 9.5 four minute earthquake impacting 250,000 people in this area. It would be devastating. Listen to the lessons from Japan. I have serious concerns about Hanford if you are preparing for only a 6.0 to 7.0 seismic quake. You need to revisit this issue. There is a fault running down the Columbia.

Answer: DOE-ORP: DOE-HQ's Health, Safety and Security organization is looking at "beyond design phase." Their report is due back to DOE-Office of Environmental Management in the next month.

Comment: Is there plutonium/hydrogen leaking into the groundwater?

Answer: DOE-RL: There is plutonium-contaminated groundwater. About 20-30 years ago when the site was operational, a reverse well was injected with plutonium, which resulted in a three-foot pocket of plutonium contamination. But there is nothing beyond that.

Comment: What percentage of dollars is actually going into shovel work?

Answer: DOE-RL: It is difficult to make that distinction, because everything contributes to cleanup, e.g., we need Human Resources to be able to hire workers; we need fire and security services. We are examining our infrastructure costs to see if there are opportunities to reduce those costs as much as possible.

Comment: I am pleading with you. We have families. Can you please look for better energy alternatives? I do not want my grandchildren living in fear of stuff going wrong. Is Congress looking to cut your money?

Answer: DOE-RL: I've spoken with congressional staffers. DOE's message is that cleanup is not discretionary. That said, everything is on the table (House of Representatives). We do not believe Hanford will be impacted in 2011. Your continued support helps sustain our funding.

Answer: Ecology: Please talk to your legislators. Our Northwest delegation has been amazing in getting us money. However, as sites in other states get cleaned up, we are losing cleanup support from those states. Talk to your cousin in Ohio on the importance of Hanford cleanup. Ask them to help support Hanford cleanup. There is tremendous competition for dollars.

Comment: This comment is for EPA. I know that EPA does technical audits on achieving cleanup goals – is the work on schedule; is the cleanup adequate. One forum for these reviews is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Five-Year Review. Who is doing the current review – EPA or DOE? What is the extent of public involvement in that process?

Answer: EPA: DOE gets audited frequently (e.g., Inspector General, Government Accountability Office). DOE is completing the (third) CERCLA Five-Year Review. The report will be sent to EPA this fall. EPA will review the document and must concur with its findings. If we do not agree with the findings, EPA will require changes be made. It is my understanding that DOE plans to make the report available to the public for their review. I am sure how they plan to use the feedback.

Comment: This is my first meeting. I want to express my deep gratitude for the people in this room. It is uplifting that so many people are working so diligently to deal with something so cataclysmic. I feel sadness for DOE. When a lot of people die, you get connected; you think about others. Hanford started as a producer of weapons. Why is the Department of Defense not using their budget to clean up what they created? The people who represent me do not really represent me. We will die. You are talking about the lives of generations. This is insanity. We need to reach out to those who are ignorant and running things. \$2B is nothing for this cleanup when so much money is being spent on wars. Demand more money. This is a mistake. They could make this right. The government needs to make this a priority.

Comment: I've been hanging around Hanford issues a long time. You need to be improving public involvement. A meeting like this is needed once a year. You are not living up to your agreement; you've lowered public involvement. Try and improve that.

You, DOE, said you did not have any responsibility for the power plant. Energy Northwest is planning to bring in plutonium to run an experiment. Energy Northwest has some views on public involvement. I've had some interactions with the Columbia Generating Station. They need public involvement.

Answer: DOE-RL: Our public involvement efforts are not perfect. We are looking for ways to improve them. The agencies will have a public process on their public involvement plan in the coming months. I like the forum we are having tonight. In the fall we participated in small group discussions at Portland State University, which were also very good.

On April 14, I will be touring the Columbia Generating Station. At that time, I will bring up the concerns voiced here tonight on public involvement, MOX fuel and license renewal.

Comment: I know the plan is to process national waste in WTP. Are there any plans to process international waste (waste from other countries)?

Answer: DOE-ORP: WTP is being built to treat Hanford waste.

Comment: Could you store other (national) waste?

Answer: DOE-RL: ERDF is the long-term disposal site for Hanford low-level waste. We do dispose of naval submarine reactor cores. There are six or seven permitted landfills.

Comment: It is sad about the vit plant. It is barely squeaking by. I know what is happening. The material from the Trojan plant was going to be reprocessed. That was 30 years ago and we are still waiting. Reprocessing is a fantasy. Do you think you can manage 100 power plants? We are building cathedrals for cancer treatment. One out of every two men and one out of every three women will get cancer. Tell the President it is time to stop killing us. Stop the madness. Take the single-shell tank waste that is leaking and put it into double-shell tanks now. I appreciate the cleanup, but it looks like you are just moving stuff around. It is madness to put all the plutonium in one place where any good terrorist can find it. Another madness is small nuclear plants in villages. I saw nothing on how to escape from our home. This is learned helplessness – just learn to live with the stuff. The earth cannot live with this stuff any longer. Talk to, educate the President.

Comment: There is a lot of interest in nuclear power – the Columbia Generating Station, Pacific Northwest National Laboratory (PNNL). We need to have some conversations on this issue. The Lab is considering producing some of this MOX fuel. You (DOE) said that Hanford was not processing MOX fuel; that the primary job at Hanford was supposed to be cleanup. Now the Generating Station wants to experiment with MOX. This is a back door re-introduction of a former issue. We find out that Northwest Energy is doing this and PNNL is participating. It affects your credibility and going after funding.

This is to the Department of Health. What levels of cesium, strontium-90 and Iodine are being reported. Based on your criteria, how close are you to issuing a warning?

Answer: Washington State Department of Health: Iodine is a gas that becomes airborne and passes over. We take daily samples. The levels found are 300 times less than the level that would require a warning. Cesium is a gamma emitter. The levels were so low it could not be quantified. I have heard nothing about strontium 90.

Regarding levels found in Spokane milk, EPA takes samples twice a year in Spokane and Tacoma. It was just coincidence that they were sampling at this time. The level found was really small. It was 5000 times less than our intervention level.

Answer: State of Oregon: Oregon sampling is done in Corvallis and Milwaukee.

Comment: Why are strontium levels not being discussed?

Answer: Washington State Department of Health: It is a beta emitter and takes longer to detect. We are looking for it.

There is no immediate danger. The problem is long-term damage from longer-lived isotopes. Iodine has a half life of 5 to 8 days. It is a thyroid-seeking isotope that has greatest impact on children.

Comment: I don't think the comparison of a chest x-ray vs. uptake is very useful.

Answer: Washington State Department of Health: Comment: No, I think it is a very useful comparison, but it is very complicated to compute.

Comment: I want to thank everyone for staying so late. I want to urge everyone to come out to the May 19 Greater Than Class C public meeting. We will be targeted if you do not show up. There have been some successes. A lot of soil cleanup was done along the Columbia River. A lot of progress was made these past few years. I want to remind everyone of the difference you made. Ten years ago not much cleanup work was being done along the Columbia River. DOE did not stop dumping untreated waste until 1994 – seventeen years ago. It is really important for you to be here. You made a difference.

Comment: My dad worked at Hanford for ARCO 35 years ago as a guard. My first job was as a guard then an electrician. This is my fourth meeting. In 2008, the DOE-ORP manager caused me to be fired. I went to the Richland State of the Site (SOS) meeting and talked about safety concerns with the acting DOE-ORP manager. There are major safety culture problems at Bechtel. I am concerned about the fear factor, retaliation, fatalism, apathy. They need your help over at Bechtel.

Answer: DOE-ORP: We appreciate your comments. I am aware of your concerns and we are following up on what you said. DOE will not tolerate a lax safety culture or retaliation.